AMENDMENTS TO THE DRAWINGS

Please amend Figures 1 and 2 as provided in the attached replacement sheet 1 and replacement sheet 2.

REMARKS

Claims 11-21 are now pending in the application. Claims 14-16 and 18-21 are amended. Figures 1 and 2 are also amended. Claim 22 is cancelled. No new matter is presented. The above amendments and the following remarks are considered by Applicants to overcome each rejection raised by the Examiner and to place the application in condition for allowance. An early Notice of Allowance is therefore requested.

Claim 15 is objected to for containing an informality. Claim 15 is amended to overcome the cited objection. Therefore, Applicants request the withdrawal of the objection to claim 15.

The drawings are objected to for failing to show every feature recited in the claims. Specifically, the Examiner indicates that the "tilting device for tilting the camera chip" in claim 14 and the "imaging system having at least two different adjustable magnification" in claim 11 must be illustrated in the drawings or cancelled from the claims. Figures 1 and 2 are amended to illustrate these features. Therefore, in view of the amendments to the drawings, Applicants request that the objection to the drawings be withdrawn.

Claims 13-16, and 18-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The Examiner states that the feature of an interchangeable objection recited in claim 13 is unclear. An interchangeable objective is an objective which is located along with other objectives at a changing device. At least one of the objectives at the changing device is introduced into the beam path by rotation or a similar movement. In view of this clarification, Applicants request that the rejection of claim 13 be withdrawn.

Claims 14, 15, 16, 18, 19, 20, and 21 are amended to more clearly recite the features of the claimed invention. With regard to claim 14, the Examiner states that it is unclear whether the limitation is directed to an image recording unit, the tilting device, or the camera chip. Claim 14 is directed to an image recording unit having a tilting device and a camera chip. Claim 14 is also amended to more clearly recite the features of the claimed invention. Claims 18 and 19 are amended to overcome the cited objections. Also, the feature of "an eye tracker unit generating a corresponding reference value" is amended to clarify that the reference value is generated with respect to the amount of movement and direction. In view of these amendments, Applicants respectfully request the withdrawal of the rejection of claims 14, 15, 16, 18, 19, 20, and 21.

Claims 11, 13, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kasahara et al. (U.S. Patent No. 5,548,354) in view of Nishio et al. (U.S. Patent No.

5,430,507). The Examiner takes the position that the combination of the cited references teach or suggest all the features recited in claims 11, 13, 15, and 17. Applicants respectfully disagree.

Kasahara is directed to an apparatus for observing and photographing cornea cells including an indicator projecting means, an eye-front observation optical system, an illuminating system, an enlarged optical system and a cornea self focusing detector. The corneas self-focusing detector is automatically moved in the X and Y directions with respect to the optical axis of the eye-front observation optical system such that the light spot on the monitor screen by the reflected light from the subject part of the position detection indicator is brought to a specified position on the screen whereby an enlarged image of the cells is recorded and photographed and displayed simultaneous with the eye-front image in which the light spot of the photographing sight is positioned.

Nishio is directed to an ophthalmologic apparatus that includes an optical system for illuminating a subject's eye, an optical system for observing the eye illuminated by the illumination optical system, an alignment detecting system for detecting the alignment of the observation optical system with the eye, and switchover circuit for switching over a reference allowable range to another range.

It is submitted that the combination of the cited references fail to teach or suggest all the features recited in claims 11, 13, 15, and 17. The present invention is based on an eyetracker unit which detects the position of the eye and provides control signals completely independent from the projected light marks. The first setting of the imaging system of the eyetracker unit serves for detecting the eye and pupil as the basis for positioning the ophthalmologic device. Then, the light marks are set for diagnosis and the eye movement is tracked. The magnification setting of the imaging system of the eyetracker unit is changed for this purpose. The cited references neither teach nor suggest these features. Specifically, the cited references fail to teach or suggest an eyetracker unit that is used for eye detection and pupil detection as well as tracking the pattern of marks.

In contrast to the teachings of the claimed invention, Kasahara discloses an endothelial camera without a magnification changer. Kasahara also discloses an additional indicator projecting means. This additional light projection device serves only for positioning in that a light reflection mark is generated and is imaged on a monitor and positioned in a target zone. Nishio discloses an endothelial cameral having at least two magnification stages. Nishio also discloses an additional alignment detecting system. This system also contains an additional indexing illumination for generating light marks which are

then used for positioning. Nishio does not provide two magnification stages for detecting the position of the eye. Thus, Nishio does not provide an eye tracker unit as provided in the claimed invention.

In contrast, the claimed invention provides an eyetracker unit, which detects the position of the eye and provides control signals completely independent from the projected light marks. In other words, the claimed invention detects the eye and determines the position of the eye. Specifically, the cited references fail to teach or suggest an eye tracker unit includes an imaging system, said imaging system having at least two different adjustable magnifications. Therefore, it is submitted that the cited references fail to teach or suggest all the features recited in claim 11, 13, 15 and 17. Thus, Applicants request the withdrawal of the rejection of claims 11, 13, 15, and 17 under 35 U.S.C. 103(a).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kasahara in view of Sander et al. (U.S. Patent No. 5,530,587). The Examiner takes the position that the combination of Kasahara and Sader teach or suggest the features recited in claim 12. Applicants respectfully disagree.

Sander discloses an operation microscope with variable stereo angle and variable magnification. Specifically, Sander discloses that the stereo angle is changed depending on the selected magnification. As a result, the stereo angle is held constant when changing the magnification. This disclosure of Sander does not cure the deficiencies of Kasahara. Specifically, the cited references fail to teach or suggest an eye tracker unit that includes an imaging system having at least two different adjustable magnifications. The imaging system 3 of Kasahara is not the same as the eye tracker of the present invention. Thus, it is submitted that by its dependency to claim 11, claim 12 recites patentable subject matter. Applicants respectfully request the withdrawal of the rejection of claim 12 under 35 U.S.C. 103(a).

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kasahara in view of Koest et al. (U.S. Patent No. 6,286,958). The Examiner takes the position that the combination of Kasahara and Koest teach or suggest the features recited in claim 14. Applicants respectfully disagree.

Koest discloses a pentacam which can be tilted and rotated for adhering to the Scheimpflug condition. Claim 14 is dependent upon claim 11. It is submitted that for at least the reasons mentioned above, claim 14 recites patentable subject matter. More specifically, it is submitted that Koest does not cure the deficiencies of Kasahara. The cited references do

not teach or suggest an eye tracker unit as provided in the claimed invention. Therefore, Applicants request that the rejection of claim 14 be withdrawn.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kasahara in view of Sjoholm (U.S. Patent No. 6,157,855). The Examiner takes the position that the combination of Kasahara and Sjoholm teach or suggest the features recited in claim 16. Applicants respectfully disagree.

Sjoholm discloses a medical device with a central control unit, keyboard and a mouse. Claim 16 is dependent upon claim 11. It is submitted that for at least the reasons mentioned above, claim 16 recites patentable subject matter. The cited references do not teach or suggest an eye tracker unit as provided in the claimed invention. Therefore, Applicants request that the rejection of claim 16 be withdrawn.

Claims 18, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujieda in view of Nishio and further in view of Zeimer (U.S. Patent No. 5,943,116). Applicants respectfully traverse the rejection of claims 18, 19, and 20.

Fujieda discloses an ophthalmic apparatus having a measuring device for measuring or examining an eye to be examined utilizing reflection of a luminous flux projected into the eye through a pupil. The ophthalmic apparatus comprises a moving device for moving the measuring device relative to the eye, a target projecting device for projecting an alignment target on a cornea of the eye, a target detecting device, a photographing device and a judging device.

Zeimer discloses a system for obtaining images of the fundus of an eye that includes an illumination device which directs a light beam onto a portion of the fundus of the eye, and a view camera which records the portion of the light reflected from the fundus of the eye.

It is submitted that the combination of the cited references fail to teach or suggest all the features recited in claims 18, 19, and 20. Specifically, the cited references fail to teach or suggest an eye tracker unit generating a corresponding reference value from these signals with respect to amount of movement and direction for a positioning device. The claimed invention provides an eye tracker unit that can be used for detecting the pupil or eye as well as tracking illumination patterns by changing the magnification of the imaging system of the eyetracker unit.

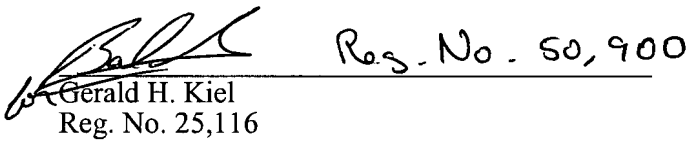
Nishio does not teach or suggest an ophthalmologic device which has two different magnification stages for detecting the position of the eye. Nishio merely observes the eye. The eye tracker unit of the present invention detects the eye or its pupil in order to align the ophthalmologic device and then detects the eye movement and tracks the illumination of the

movement. It is submitted that the combination of the cited references do not provide a method of detecting the eye or pupil as well as detecting the amount of movement of the eye and the illumination of the movement to determine the position of the eye. Therefore, it further submitted that the cited references fail to teach or suggest all the features of the claimed invention. Accordingly, Applicants request the withdrawal of the rejection of claims 18, 19, and 20 under 35 U.S.C. 103(a).

Claims 20 and 21 are dependent upon claim 18. It is submitted that for at least the reasons mentioned above, claims 20 and 21 recite patentable subject matter. Therefore, Applicants request that the rejection of claim 16 be withdrawn.

For the reasons presented above, claims 11-21, all the claims pending in the application are believed by Applicants to define patentable subject matter and should be passed to issue at the earliest possible time. A Notice of Allowance is requested.

Respectfully submitted,



Gerald H. Kiel
Reg. No. 25,116

REED SMITH LLP
599 Lexington Avenue
New York, NY 10022
(P) 212-521-5400

Attorney for Applicant